1: DeLand O-4 (No date)1908 NQ17 Mandan NQ17



342 513 are made like tombs, surrounded by skins. These men are always naked, covered only with a buffalo robe. * * * * Their fort 251 is full of caves, in which are stored such articles as grain, food, 436 fat, dressed robes and bear skins. They are well supplied with these; it is the money of the country. The more they have of it 304 the richer they believe themselves to be. They are fond of tattooing, but never more than half of the body is tattoed, both of 285 men and women. They make wicker work very neatly, flat and in baskets.

**Pottery.** "They make use of earthen pots, which they use like 323 many other nations for cooking their food. They are for the most 261 part great eaters; are eager for feasts. They brought me every day more than twenty dishes of wheat, beans and pumpkins, all cooked. Mr. de la Marque, who did not hate feasts, went to them continually with my children. As I did not go to them my share 471 was sent to me. The men are stout and tall, generally very active, fairly good looking, with a good physiognomy. The women have not the Indian physiognomy. The men indulge in a sort of ball 526 play on the squares and ramparts.

000 "On the evening of the 4th the Sieur Nolant and my son arrived, well satisfied with their journey, having been well received and strongly urged to remain longer. The fort is on the bank of the river, as large again as this; the squares and streets are very fine and clean; their palisade is in the best order and strength; the whole built in the same fashion as the one in which we were. From what they could hear all their forts are alike; who saw one saw all, with this difference, that some were much larger than others. The nearest to the Pananas that the river appeared to go was, according to the compass, southwest by south, by signs given to them; the lower part may go to the sea to the southwest by west. They were often amused by broken talk; not being able to answer questions put to them, they answered something else, for want of understanding. The waters of their rivers come down with great rapidity, having many shoals. The water is not good for drinking, being brakish. We have constantly found from the last mountain almost all the marshes and ponds brakish or sulphurous. What they could understand was that on the lower part of the river there were men like us, who made cloth and linen, were very numerous and had wars with a large part of the Indians. We saw that it was useless to question them, as they

3: Will and Spinden E-5 (1905) 1906
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142 grey. He also says there were several children whose hair was perfectly grey, these were mostly girls.

Catlin[1] possibly exaggerates the physical differences. His account states that their personal appearance at once showed them as more than savages; there were many shades of complexion and hair; many women had white skin with hazel, blue, and grey eyes; they showed every shade of hair except red; some had hair perfectly white or a silvery grey, women more than men; the grey hair was very coarse, while the other hair was fine and soft.

Maximilian took particular pains to ridicule the theory of white origin and especially that of Welsh origin. But even he admits the peculiarity of complexion seen at times. On this subject he said that they were usually brown or copper colored, some were yellow or whitish. When clean there were a number who were nearly white with red cheeks; they had long coarse hair usually black, but many children had brown hair; there were families with grey hair; one family contained members with brown, black, grey, and white hair and eye-lashes.[2] So much for color. There can be little question that there was a tendency toward light complexion among the Mandans, and all of the authorities, even Maximilian, express the opinion that this was not from contact with the whites. Among the Hidatsa and Crow as well is found the phenomenon of grey and white haired women and children, but there is no account of the brown, soft hair, and light skin further described by the earliest visitors to the Mandans. As to the cause of this light skin [143] which appeared now and then it is difficult to decide. It seems, however, to place the Mandans among the tribes where partial albinism was of frequent occurrence. It is almost needless to say that there is absolutely no trace either in language or in physical characteristics of any European origin or admixture.

● 141 Next is the question of size and general physique. Verendrye[3] says:—"The men are stout and tall, generally very active, fairly good looking. . . ." In a note appended to the location of an old Mandan village, on one of Lewis and Clarke's maps are the following words, "here human bones of large size."

[1] Op. cit., vol. I, p. 82. [2] Op. cit., pp. 374-5. [3] Op. cit., p. 21.

3:Will and Spinden E-5 (1905) 1906
NQ17 Mandan NQ17



Henry says,[1] the men were tall, stout and well built. Maximilian also testifies along the same line: "Most of the Mandans are vigorous men, strong and large."[2] And adds later that they were a strong race, a little above medium height, possibly not as large as the Minnetarees, robust, with broad shoulders.[3] Judging from the information so far, the Mandans should be considered a large race, but on the other side there is the statement from Catlin[4] that the stature of the Mandans was below the ordinary, but they were well proportioned. All of these observers but Catlin thus speak of the Mandans as above average height. 141●

For a further description of the Mandan physique there are only a few words from Maximilian,[5] who says that they had a less aquiline nose than their neighbors, less prominent cheek bones than the Dakotas; thin noses and straight; long, narrow eyes of a deep brown, a little raised and contracted at the inner corner; large mouth, large angular jaws, various shaped heads, but foreheads no lower on the average than among Europeans. 142

VILLAGES:—The Mandans, as has been said, were a sedentary tribe and lived in fixed villages for long periods of time. In these villages they built lasting lodges of a type similar to those of the Arikara, Omaha, and other tribes lower down the Missouri, though with small differences in the details of construction. The villages were usually well fortified, neat and orderly in the early days, but a considerable change seems to have come upon the people after their misfortunes, for there was much less care taken in the arrangement and fortification of the villages in their later locations. The first description of the Mandan village is from Verendrye, who makes it appear almost a model town. As this is the only description of the Mandan villages during the prosperity of the nation,[1] a summary of his account is here given:[6] 361 [171]

"Many people came to meet us but nothing in comparison with what appeared on the ramparts and along the trenches. . . . . Their fort can only be gained by steps or posts which can be removed when the enemy threatens. . . . . If all the forts are

[1] Op. cit., p. 341. [2] Op. cit., vol. I, p. 29. [3] Ibid., p. 372.
[4] Op. cit., vol. I, p. 96. [5] Op. cit., p. 87. [6] Op. cit., pp. 17-23.

[1] [i.e., about 1738. See p. 86.—Analyst]

3: Will and Spinden E-5 (1905) 1906
NQ17 Mandan NQ17



secured, one in poor condition. Parts of a child's skeleton were found and broken bits of skulls occurred occasionally in mounds or pits. The two skeletons, besides being apparently of two different types, exemplified two very different methods of burial.

The first skeleton, which was complete, was found under the largest mound at the bottom of a small circular pit. The skeleton was in a flexed position, hands about the neck, and knees drawn up nearly to the chin. It lay on the right side and faced towards the southwest. No ornaments of any sort were found about the remains, but a bone hoe lay above and another just below them; a brown layer, below, possibly marked the remains of some sort of wrapping. This burial shows nothing whatever in common with that of the Mandans so far as accounts go; and it resembles that of the Arikara only in that it was placed underground, since the Arikara lined the grave with stone and buried many things of value with the dead, often placing more than one body in a grave which was partitioned into compartments.

The second burial differed in every detail from the first, but seemed to correspond to the Mandan custom. The bones had been collected into a bundle and buried without ceremony, and a child's remains in an irregular mass were found associated with the larger bundle of bones. The skull of the adult was missing. According to Catlin after the dead body had dried on the scaffold it was taken down, the head was kept in one of the shrines and the bones were buried in a bundle. The body of a child was tied to the scaffold of an adult, and it is probable that the bones were buried along with those of the older person. Hence this burial may be confidently identified as Mandan. A number of broken fragments of children's skulls were found among the other refuse of the mounds and pits, but none of the other bones of the skeleton were ever present, which corroborates Catlin's story of the separation of the skulls from the remainder of the body.

As has been said, the two skeletons found seemed to be of different types. The first one was that of a man about fifty years of age, whose height was 1594 cm. The skeleton was

3:Will and Spinden E-5 (1905) 1906
NQ17 Mandan NQ17



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nearly perfect and showed no deformities or injuries. Measurements of the skeleton itself will be considered in connection with those of the second one. A table of skull measurements is given below, and, for comparison, measurements of three Mandan skulls given in the Army Medical Museum Report[1] are appended.

| | Skull of Skeleton 1. | Skulls from Army Medical Museum | | |
|---|---|---|---|---|
| Cranial index | 71.4 | 79.4 | 77.3 | 74.7 |
| Height-length index | 70.8 | 73.1 | 70.3 | 71. |
| Height-breadth index | 90.9 | 88.4 | 91.9 | 97.8 |
| Facial index (total) | 89.2 | | | |
| Facial index (upper) | 58.4 | | | |
| Gnathic index | 91.5 | | | |
| Orbital " | 89.4 | | | |
| Nasal " | 47.1 | | | |
| Palatal " | 117.6 | | | |
| Capacity | 1265. | 1450. | 1370. | 1440. |

Figures on nine skulls given by Dr. Boas[2] averaged 80.6 for the cephalic index. On measurements of 156 persons of both the Mandan and Hidatsa tribes, an average cephalic index of 79.6 was obtained by him, but from the seriation of the measurements the tendency was marked towards longer heads, six individuals having an index of 70, six more of 71.

The second skeleton was that of a man about forty years old. The height was much greater than that of the first, being about 1738 cm. Some of the bones in this skeleton were broken and a few of the smaller ones were missing. The bones showed signs of severe rheumatic trouble.

[1] G. A. Otis: Check List of the U. S. Army Medical Museum, p. 72, 1878.
[2] Zeitschrift für Ethnology, vol. 27, p. 397.

3: Will and Spinden E-5 (1905) 1906
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The more important figures for each skeleton are:—

FEMUR.

| | No. 1. | | No. 2. | |
|---|---|---|---|---|
| | RIGHT | LEFT | RIGHT | LEFT |
| Length | 433 | 430 | 471 | — |
| Oblique length | 429 | 425 | 470 | — |
| Diameter of head | 46 | 46 | 49 | 48 |
| Platymeric index | 71.4 | 63.8 | 65.7 | 68.5 |
| Transverse diameter of condyles | 83 | 83 | 85 | — |
| Angle of neck and shaft | 118 | 118 | 122 | 122 |
| Anterior posterior diameter at mid-shaft | 27 | 26 | 29 | 29 |
| Transverse diameter at mid-shaft | 27 | 27 | 28 | 28 |

TIBIA.

| | RIGHT | LEFT | RIGHT | LEFT |
|---|---|---|---|---|
| Length | 361 | 362 | 385 | 382 |
| Diameter of condyles | 76 | 76 | 80 | 82 |
| Anterior posterior diameter at mid-shaft | 31 | 30 | 39 | 38 |
| Transverse diameter at mid-shaft | 19 | 20 | 22 | 20 |
| Index | 62.9 | 66.6 | 56.4 | 52.8 |

HUMERUS.

| | | | | |
|---|---|---|---|---|
| Length | 320 | 317 | 347 | 337 |
| Diameter of head | 46 | 46 | 50 | 50 |
| Anterior posterior diameter at deltoid eminence | 17 | 17 | 21 | 16 |
| Transverse at same | 21 | 21 | 21 | 21 |
| Angle of neck and shaft | 125 | 125 | 120 | 125 |
| Index at deltoid eminence | 80.9 | — | 100. | — |
| Torsion of humerus | 133 | 122 | 115 | 121 |

SCAPULA.

| | | | | |
|---|---|---|---|---|
| Length | 158 | 162 | 165 | — |
| Breadth | 108 | 105 | 110 | — |
| Length at base of spine | 124 | 127 | 129 | — |
| Scapular index | 81.2 | 82.6 | 85.2 | — |
| Length of radius | 245 | 244 | 271 | — |
| Length of clavicle | 150 | 155 | 157 | — |

3: Will and Spinden E-5 (1905) 1906
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PELVIS.

| | | | |
|---|---|---|---|
| Breadth | 301 | 292 | 172 X |
| Height | 217 | 216 | |
| Breadth between ischia tubera | 164 | 143 | 141 ● |
| Between ischia spines | 110 | 79 | |
| Sub-pubic angle | 77.5 | 43 | |
| Diameter of true pelvis | 154 | 125 | |
| Conjugate diameter | 117 | 100 | |
| Pelvic index | 75.9 | 80 | |
| Oblique diameter | 138 | 118 | |
| Depth of symphysis | 42 | 48 | |
| Depth of pelvic cavity | 102 | 109 | |

Although no comparative figures were available for anything except the skulls of the Mandans, all of the other Siouan tribes, whose measurements are given by Dr. Boas, show prevailingly a tall stature. On the other hand, the Arikara and Pawnee average much shorter. This marks the only well defined distinction which can here be made between the Arikara and the Mandans, as the cranial index of the former also shows a long-headed type, though probably not quite as long as the Mandan. An average of 174 Arikara individuals[1] gave a cephalic index of 81.5. Still another series of measurements gave 82.[2] The Army Medical Museum Report[3] gives on one Arikara skull, 75.8, and on four others the average was 82. None of the Arikara skulls run as low as 71 and 70, as did some of the Mandan.

Probably the second skeleton can safely be called Mandan. The first one, however, seems to be hard to place, for the method of burial was distinctly not Mandan, and the skeleton was of short stature.

[1] Boas: Op. cit., p. 388.
[2] Ibid., p. 387.
[3] G. A. Otis: Check List of the U. S. Army Medical Museum, p. 72.

7: Catlin R, E-5 (1832-1840) 1857
NQ17 Mandan NQ17



whose doom is fixed, to live just long enough to be imperfectly known, and then to fall before the fell disease or sword of civilizing devastation.

The stature of the Mandans is rather below the ordinary size of man, with beautiful symmetry of form and proportion, and wonderful suppleness and elasticity; they are pleasingly erect and graceful, both in their walk and their attitudes; and the hair of the men, which generally spreads over their backs, falling down to the hams, and sometimes to the ground, is divided into plaits or slabs of two inches in width, and filled with a profusion of glue and red earth or vermillion, at intervals of an inch or two, which becoming very hard, remains in and unchanged from year to year.

This mode of dressing the hair is curious, and gives to the Mandans the most singular appearance. The hair of the men is uniformly all laid over from the forehead backwards; carefully kept above and resting on the ear, and thence falling down over the back, in these flattened bunches, and painted red, extending oftentimes quite on to the calf of the leg, and sometimes in such profusion as almost to conceal the whole figure from the person walking behind them. In the portrait of San-ja-ka-ko-kah (the deceiving wolf, PLATE 54), where he is represented at full length, with several others of his family around him in a group, there will be seen a fair illustration of these and other customs of these people.

The hair of the women is also worn as long as they can possibly cultivate it, oiled very often, which preserves on it a beautiful gloss and shows its natural colour. They often braid it in two large plaits, one falling down just back of the ear, on each side of the head; and on any occasion which requires them to "put on their best looks," they pass their fingers through it, drawing it out of braid, and spreading it over their shoulders. The Mandan women observe strictly the same custom, which I observed amongst the Crows and Blackfeet (and, in fact, all other tribes I have seen, without a single exception), of parting the hair on the forehead, and always keeping the crease or separation filled with vermilion or other red paint. This is one of the very few little (and apparently trivial) customs which I have found amongst the Indians, without being able to assign any cause for it, other than that "they are Indians," and that this is an Indian fashion.

In mourning, like the Crows and most other tribes, the women are obliged to crop their hair all off; and the usual term of that condolence is until the hair has grown again to its former length

When a man mourns for the death of a near relation the case is quite different; his long, valued tresses, are of much greater importance, and only a lock or two can be spared. Just enough to tell of his grief to his friends, without destroying his most valued ornament, is doing just reverence and respect to the dead.

To repeat what I have said before, the Mandans are a pleasing and friendly race of people, of whom it is proverbial amongst the Traders and all who ever have known them that their treatment of white men in their